Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	)	
	)	
Amendment of Parts 2 and 25 to Implement	)	IB Docket No. 99-67
the Global Mobile Personal Communications	)	
by Satellite (GMPCS) Memorandum	)	
of Understanding and Arrangements	)	
	)	
Petition of the National Telecommunications	)	RM No. 9165
and Information Administration to Amend Part 25	)	
of the Commission's Rules to Establish Emissions	)	
Limits for Mobile and Portable Earth Stations	)	
Operating in the 1610-1660.5 MHz Band	)	

To: The Commission

COMMENTS OF THE BOEING COMPANY

The Boeing Company ("Boeing"), by its attorneys and pursuant to Section 1.415 of the Commission's Rules, 47 C.F.R. § 1.415, hereby comments in response to the above-referenced Notice of Proposed Rule Making ("*NPRM*") released on March 5, 1999.[1] Boeing commends the Commission's efforts to implement the international arrangements governing Global Mobile Personal Communications by Satellite ("GMPCS") that were adopted under the auspices of the

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1 *See In the Matter of Amendment of Parts 2 and 25 to Implement the Global Personal Communications by Satellite (GMPCS) Memorandum of Understanding and Arrangements*, etc., IB Docket No. 99-67 (RM No. 9165), Notice of Proposed Rulemaking, FCC 99-37 (rel. March 5, 1999) (hereinafter "*NPRM*"). On April 29, 1999, the Acting Chief of the International Bureau issued an *Erratum* to the *NPRM* extending the deadline for filing initial comments from May 3, 1999 to June 21, 1999, in order to comply with the comment period established under the North American Free Trade Agreement.

International Telecommunications Union ("ITU") last year and to promote global roaming of GMPCS terminals and ubiquitous service.

Boeing is a leading contributor to the global aerospace and satellite telecommunications industries, providing technical expertise, manufacturing, launch services and on-orbit network control for a wide variety of commercial and government satellite systems. Boeing has pending before the Commission two applications to launch and operate non-geostationary ("NGSO") medium earth orbit ("MEO") satellite systems in the fixed and mobile satellite services.[2]

Boeing has followed with great interest the Commission's efforts to implement the GMPCS Memorandum of Understanding and related Arrangements ("GMPCS-MoU") that is expected to facilitate worldwide deployment and trans-border use of fixed and mobile satellite terminals and equipment used to communicate with global satellite systems. Boeing supports the comprehensive procedure proposed for the licensing, marketing, certification, and customer treatment of GMPCS terminals. Boeing also supports the important safeguards proposed against potential interference to existing aeronautical radionavigation services.

The GMPCS MoU is designed to facilitate the mutual recognition and cross-border transport of GMPCS terminals providing voice, data, Internet, and broadband services. Boeing supports the Commission's proposal to amend its rules to enable manufacturers to obtain certification for GMPCS terminals through the Commission's equipment certification process and its proposal to require this certification for all GMPCS terminals sold or leased for use in the

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2 *See, e.g.*, Boeing Satellite System Application in the 2 GHz Mobile-Satellite Service and Aeronautical Radionavigation-Satellite Service, FCC File No. 179-SAT-P/LA-97 (filed Sept. 26, 1997). Boeing's MSS system is designed to provide communication, navigation and surveillance services for global avionics. Boeing's MSS system would use portions of the 2 GHz band to provide a number of communication, navigation and surveillance air traffic management services ("CNS/ATM") that are needed by the global aviation industry to increase navigational accuracy and, with it, air space safety, capacity and efficiency.

United States. The proposed procedures also contemplate that all GMPCS terminals sold outside the United States that are to be used in the United States or transported through the United States will be required to bear the "ITU mark."[3] The Commission states that many foreign countries will view this mark as sufficient to allow equipment to cross national borders. Boeing agrees with the Commission's view that the mark will likely facilitate the sale of GMPCS in other countries.

Boeing agrees that the development of international certification standards are essential because of the possible need for equipment to be approved in every country where service might be provided, and also because the lack of an international standard could pose a substantial impediment to the development of GMPCS systems. In this regard, Boeing believes that it is imperative that the United States, along with other Administrations, implement the GMPCS Arrangements and adopt domestic rules and requirements expeditiously in order to facilitate the global roaming of GMPCS terminals through national territories without such terminals being subject to import restrictions, such as confiscation or excessive tariffs or duties. Indeed, expedient certification of terminals would be a major benefit to the global satellite industry, since an approval is recognized by many foreign countries as sufficient to allow the equipment to transit borders. Boeing believes that the rapid implementation of these Arrangements by Administrations and the institution of a global registry and GMPCS marking regime will ensure the smooth introduction of these new global voice, data and broadband services to developed and developing world markets.

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[3] According to the Commission, under the MoU, once a terminal is certified by an administration, it may be registered at the International Telecommunications Union (ITU) in Geneva and marked with the new, international "GMPCS-MoU ITU REGISTRY" mark (the "ITU Mark").

In the *NPRM*, the Commission proposes to require that all GMPCS terminals sold or leased, or imported for sale for lease in the United States and intended to be used with an authorized GMPCS service to obtain an FCC certification in conformance with the requirements proposed in the *NPRM* and the procedures described in Part 2 of the Commission's Rules.[4] In an effort to distinguish hand-held or portable GMPCS terminals from other mobile terminals, however, the Commission proposes to exempt mobile terminals permanently installed on ships, boats or planes (which the Commission notes are "example[s]") from this requirement. The Commission seeks comment on this exemption.

Boeing supports the Commission's proposal not to extend the GMPCS terminal certification procedures to other mobile terminals, such as those permanently installed on ships, boats, or planes. Boeing concurs with the Commission's tentative conclusion on this point. Boeing also urges the Commission to clarify that terminals that may be placed in use with aeronautical mobile satellite systems for the provision of aeronautical mobile satellite service ("AMSS") and aeronautical mobile satellite (route) service ("AMS(R)S") will not be included in the GMPCS equipment certification process. Existing civil aviation authorities and organizations, such as the International Civil Aviation Organization ("ICAO"), the Federal Aviation Administration ("FAA"), and the Radio Technical Commission for Aeronautics ("RTCA") have procedures in place for the development and maintenance of standards and procedures for aeronautical mobile satellite service equipment to avoid interference to other radio services, as well as rules for the operation of such equipment across national boundaries.[5]

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4 *See NPRM* at ¶ 24.

5 Boeing is a key player in the international aeronautical fora, participating in the International Coordinating Council of Aerospace Industries Association, and through that group, the ICAO. Boeing is also a frequent participant in the Special Committees and Task Forces formed under the auspices of the RTCA. Boeing is also participating in the

There is thus no need for inclusion by the Commission of aeronautical satellite terminals within the scope of its implementation of the GMPCS MoU.

In the *NPRM*, the Commission proposes to adopt out-of-band emissions limits for protection of aeronautical uses of the radionavigation satellite service.[6] Specifically, the Commission proposes to amend its technical rules to adopt additional limits on out-of-band emissions from MSS terminals. According to the Commission, the National Telecommunications and Information Administration ("NTIA") and the FAA have maintained that –70 dBW/MHz limit is needed to protect aircraft reception of Global Navigation Satellite System ("GLONASS") signals in the 1597-1605 MHz segment from out-of-band emissions from MSS terminals with assigned frequencies between 1610 and 1660.5 MHz. The Commission proposes to adopt this requirement.

Boeing is aware of concerns surrounding the application of the same limit of –70 dBW/MHz to emitters in other bands without regard, for example, to antenna gains and probable proximity. While Boeing has this matter under study and takes no position at this time as to the appropriate out-of-band emission limit, Boeing urges the Commission to ensure that sources of interference are held to the lowest practical level so that the aggregate interference in the Global Positioning System ("GPS") band does not degrade the service. If, after careful and thorough technical review, the Commission were to uncover problems with the proposed out-of-band limit, such a finding would obviously present a significant concern to Boeing. Boeing therefore urges the Commission to fully consider any concerns associated with adopting the proposed out-of-band emissions limit of –70 dBW/MHz.

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relevant advisory groups formed to prepare for U.S. participation in WRC-2000 and is currently engaged in the ITU's conference preparatory process.

CONCLUSION

Boeing supports the Commission's efforts to implement the GMPCS MoU and to promote global roaming of terminals and ubiquitous service. Boeing urges the Commission to clarify that aircraft-based equipment operating in the 2 GHz band will also be exempt from the equipment certification requirements proposed for GMPCS terminals. Additionally, the Commission must make sure that it has fully addressed any concerns surrounding the establishment of an ultimate limit of –70 dBW/MHz to protect GPS or GLONASS reception.

Respectfully submitted,

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June 21, 1999

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[6] *See NPRM* at ¶¶ 44-77.

CERTIFICATE OF SERVICE

I, Jean C. Batcheller, do hereby certify that on this 21st day of June, 1999, I have caused a copy of the foregoing "Comments Of The Boeing Company" in IB Docket No. 99-67 to be served by Hand Delivery upon the persons listed below:

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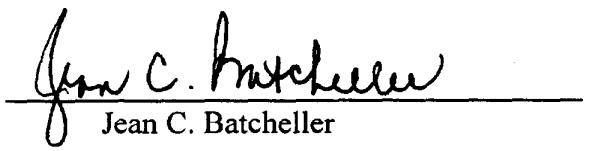

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